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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,478	02/20/2001	Taiko Yokoyama	501.39548X00	5483
20457	7590	08/25/2004	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-9889			BAUGH, APRIL L	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/785,478	Applicant(s) YOKOYAMA ET AL.	
	Examiner April L Baugh	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20010220</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 and 14-16 rejected under 35 U.S.C. 102(e) as being unpatentable by US Patent No. 6,233,601 to Walsh.

Regarding claim 1, Walsh teaches in a network system connecting a server and at least one node serving as a home terminal, a method for controlling a mobile agent comprising the following steps: storing in said server traveling data indicating which nodes to travel (column 2, lines 51-52 and 56-58); sending from said server to said node a mobile agent containing said traveling data and distribution data formed from a program to be executed at said node and/or data to be used by said node (Fig.6 and column 2, lines 41-45 and column 4, lines 11-17); loading and executing said program at said node to which said mobile agent is sent; determining a node to be moved to next by reading said traveling data attached to said mobile agent; and sending said mobile agent to a node determined by said node (column 3, lines 20-30).

Regarding claims 14, 15, and 16, Walsh teaches in a server connected to at least one node serving as a traveling destination and executing a mobile agent, a method for

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controlling a mobile agent comprising the following steps: predicting beforehand a traveling time needed for traveling based on traveling destination information and distribution data information (column 2, lines 51-52 and 56-58); dividing traveling destinations into a plurality of groups so that said traveling time is no greater than a predetermined value (column 2, lines 41-45 and column 4, lines 11-17); and distributing mobile agents to each of said groups (column 3, lines 20-30).

Regarding claim 2, Walsh teaches a method for controlling a mobile agent as described in claim 1 wherein said nodes to be traveled by said mobile agent are divided into a plurality of groups, and said distribution data is distributed to each of said plurality of groups (column 3, lines 20-30).

Regarding claim 3, Walsh teaches a method for controlling a mobile agent as described in claim 2 wherein said groups are divided so that a group traveling time of each group is no greater than a predetermined time, where said group traveling time is a sum of times required to travel a single node (column 3, lines 20-30).

Regarding claim 4, Walsh teaches a method for controlling a mobile agent as described in claim 2 wherein said groups are divided to form a predetermined number of groups by selecting nodes so that said group traveling times for said groups are uniform (column 3, lines 20-30).

Regarding claim 5, Walsh teaches a method for controlling a mobile agent as described in claim 2 wherein said groups are divided to reduce communication costs between nodes (column 2, lines 16-18).

Regarding claim 6, Walsh teaches a method for controlling a mobile agent as described in claim 2 wherein: two sets of said distribution data having identical contents

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except for said traveling data are sent to a group; traveling data of one distribution data is in an opposite sequence from traveling data of another distribution data; and traveling is completed when said two sets of said distribution data meet (column 3, lines 60-65).

Regarding claim 7, Walsh teaches a method for controlling a mobile agent as described in claim 1 wherein when a fault in a node is discovered, fault information is stored in said server and said fault information is displayed to said display device (column 5, lines 44-46).

Regarding claim 8, Walsh teaches a method for controlling a mobile agent as described in claim 7 wherein traveling data excluding said fault information stored in said server is added to said mobile agent (column 2, lines 41-46).

Regarding claim 9, Walsh teaches a method for controlling a mobile agent as described in claim 1 wherein distribution is performed according to a schedule created beforehand (column 2, lines 41-46).

Regarding claim 10, Walsh teaches a method for controlling a mobile agent as described in claim 1 wherein said traveling data is maintained and managed by editing said traveling data (column 2, lines 41-46).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-13 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,233,601 to Walsh in view of US Patent No. 6,484,036 to Sorkin et al.

Regarding claim 11, Walsh teaches a method for controlling a mobile agent as described in claim 1 (column 3, lines 20-30).

Walsh does not teach of transceiver connections. Sorkin et al. teaches wherein: said node includes means for communicating by way of a base station as in mobile telephones and means for making transceiver connections to communicate with other nodes without going through said base stations; said plurality of nodes is divided into groups of nodes that can make transceiver connections with each other; when said transceiver connectable nodes communicate by way of transceiver connections and other nodes connect by way of said base stations, groups are divided so that each group contains at least two of said base stations (column 1, lines 49-52 and 57-61 and column 2, lines 1-3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method for controlling a mobile agent of Walsh by communicating by way of a base station as in mobile telephones and means for making transceiver connections to communicate with other nodes without going through said base stations because this allows the nodes to further control the mobile agent by communicating the travel destination of the mobile agent throughout the network to other nodes.

Regarding claim 12, Walsh in view of Sorkin et al. teaches a method for controlling a mobile agent as described in claim 11 (column 3, lines 20-30).

Walsh does not teach of transceiver connections. Sorkin et al. teaches wherein when a fault occurs at a base station capable of being connected to a node and

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communication to said server or nodes in other groups is not possible, an agent is sent by way of a transceiver connection to a node capable of connecting with a working base station, and said agent is sent from said connectable node to said server or another group (column 1, lines 49-52 and 57-61 and column 2, lines 1-3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method for controlling a mobile agent of Walsh by when a fault occurs at a base station, an agent is sent by way of a transceiver connection to a node capable of connecting with a working base station because this allows the nodes to further control the mobile agent by communicating the travel destination of the mobile agent throughout the network to other nodes.

Regarding claim 13, Walsh teaches a method for controlling a mobile agent as described in claim 12 (column 3, lines 20-30).

Walsh does not teach of transceiver connections. Sorkin et al. teaches wherein when a fault occurs at a base station, transceiver-connectable nodes are searched to find a node that can connect to a working base station (column 1, lines 49-52 and 57-61 and column 2, lines 1-3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method for controlling a mobile agent of Walsh by communicating by when a fault occurs at a base station, transceiver-connectable nodes are searched to find a node that can connect to a working base station because this allows the nodes to further control the mobile agent by communicating the travel destination of the mobile agent throughout the network to other nodes.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to mobile agents in general:

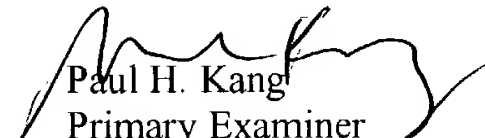
US Patent No. 6,434,595 to Suzuki et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April L Baugh whose telephone number is 703-305-5317. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul H Kang can be reached on 703-308-6123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April L Baugh
Examiner
Art Unit 2141


Paul H. Kang
Primary Examiner
Art Unit 2141

ALB